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EXAMINER
VAJDA, PETER L

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-6_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-6_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on _10 April 2006_ is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☒ All   b)☐ Some * c)☐ None of:

    1.☒ Certified copies of the priority documents have been received.

    2.☐ Certified copies of the priority documents have been received in Application No. _____.

    3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
   Paper No(s)/Mail Date _01/24/2007, 01/08/2007, 04/10/2006_.

4) ☐ Interview Summary (PTO-413)
      Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Obata *et al*. (US PGP 2004/0101770) in view of Nakata *et al*. (US PGP 2002/0119382).

Obata *et al*. teach an organic photoconductor comprising a charge transport

material having an enamine structure as depicted in formulas 1 and 1-1 (Abstract).

Formula (1) has the same structure as the charge transport compound disclosed by the

applicant in pending claim 1 (p. 2 [023-24]). Additionally, Obata teaches a charge

transporting compound of formula (2), which has the same structure as the applicant's

formula 2 recited in pending claim 2 (p. 3 [0027]). The photoconductor further

comprises a conductive support, a photosensitive layer formed on said support, wherein

the photosensitive layer contains a charge-generating substance and the enamine

charge transporting substance of formula (1) or (2) (p. 3 [0029-31]). The photosensitive

layer may preferably have a laminate structure wherein a charge transporting layer is

formed upon a charge generating layer (p. 3 [0034]). As a suitable charge generating

substance Obata teaches the use of oxytitanium phthalocyanine (p. 3 [0032]). Obata

also teaches an image forming apparatus employing the photoreceptor described above, a charging means for charging the photoreceptor, an exposure light source for forming a latent image on the photoreceptor, a developing means for developing the latent image, a transfer means for transferring the image to a transfer member and a cleaning means for cleaning the photoreceptor (p. 62-63 [0181-86]). Obata, however, does not teach a plastic deformation hardness value (Hplast) or a creep value as disclosed in the applicant's pending claim 1.

The applicant defines the plastic deformation hardness value (Hplast) as the hardness calculated by dividing a force applied to the photoreceptor by an indentation area, defined as A(hr)=26.43xhr2 (p. 64 [0154]). This is so named "plastic deformation hardness value" is commonly known in the art as universal hardness (HU), which is defined in the same manner and using the same equation. Nakata *et al*. teach a photoreceptor exhibiting good durability and stable performance regardless of environmental change (Abstract). The photoreceptors have a measured hardness (HU) in the range of from 275-380 N/mm2 (p. 39-40 Table 1). It is taught that photoreceptors with such high hardness values show good durability, high film strength, and good abrasion resistance (p. 43 [0208]). The hardness value is calculated in the same manner taught by the applicant wherein HU (N/mm2) = W/Sd, and Sd is depression surface (mm2 or area) and W is force (N) (p. 37 [0163]). Therefore, the equation cited by Nakata is the same as the equation taught by the applicant wherein each set of inventors use different nomenclature to define the same variables. Furthermore, Nakata teaches that the hardness be determined in the same environmental conditions

as the applicant, namely a temperature of 23C and a humidity of 50% (p. 37 [0164]).

Nakata does not teach that the force supplied to the indenter be 30 mN, however, this is

an experimental variable that can be changed at the experimenters discretion.

Nakata therefore teaches that by having a high hardness, in a range of about 275

to 380 N/mm2, the durability of the photoreceptor as well as the film strength and the

abrasion resistance are all improved. Therefore, it would have been obvious to any

person of ordinary skill in the art at the time of the invention to have formed the

photoreceptor of Obata *et al.* to have a high hardness as taught by Nakata in the range

of about 275 to 380 N/mm2. This would have improved the durability, film strength, and

abrasion resistance of the photoreceptor of Obata *et al.* In embodiments, the

photoreceptor of Obata is substantially similar to that of the applicant. Obata teaches

that the charge transport layer contain the enamine compound described above

dispersed in a polycarbonate binder resin to form a transport layer (p. 65-66 [0216-17]).

The ratio of the enamine to the polycarbonate is taught to 8:10, respectively by Obata,

or 44% enamine compound and 56% polycarbonate resin (8/18 x 100% =44% for

enamine compound). The applicant teaches a substantially similar transport layer

comprising an enamine compound and polycarbonate resin in a ratio of 100:112,

respectively (p. 69 [0205] of pre-grant publication). The applicant therefore teaches

47% enamine compound and 53% polycarbonate resin (100/212 x 100% = 47%

enamine). Therefore, since Obata teaches a charge transport layer of substantially

similar composition to that of the applicant, supplying it with a hardness within the range

taught by Nakata *et al.* would have also produced a creep value similar to that taught by

the applicant and certainly within the range of 2.7 to 5%. The applicant describes the creep value as a sequential deformation phenomenon undergone by a material by application of a load (pressure). Therefore, since Obata teaches substantially similar materials in their charge transport layers providing the transport layer with a hardness in the range taught by Nakata would have also provided the transport layer with a creep value within the applicant's range.

Claims 1, 3-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 2002-365820 in view of Nakata *et al.* (US PGP 2002/0119382).

JP 2002-365820 (henceforth JP '820) teach a photoconductor comprising an oxy titanylphthalocyanine charge generating material and a charge transport material having the structure of formula (5) ([0008-9]). Formula 5 has the same formula as the applicant's formula (1) wherein "n" in the applicant's formula (1) is 0. JP '820 further teaches that R3, R4, R5 and R6 groups may all be aromatic ([0009]). Embodiments further show that aryl groups are intended at these positions, particularly formula (1-6) ([0015]). The embodiments show a laminate style photoconductor wherein an interlayer is formed on a conductive substrate, and a charge generating layer is disposed on said interlayer and a charge transport layer is disposed on the generating layer ([0027]).

The applicant defines the plastic deformation hardness value (Hplast) as the hardness calculated by dividing a force applied to the photoreceptor by an indentation area, defined as $A(hr)=26.43 \times hr2$ (p. 64 [0154]). This is so named "plastic deformation hardness value" is commonly known in the art as universal hardness (HU), which is

defined in the same manner and using the same equation. Nakata *et al.* teach a photoreceptor exhibiting good durability and stable performance regardless of environmental change (Abstract). The photoreceptors have a measured hardness (HU) in the range of from 275-380 N/mm2 (p. 39-40 Table 1). It is taught that photoreceptors with such high hardness values show good durability, high film strength, and good abrasion resistance (p. 43 [0208]). The hardness value is calculated in the same manner taught by the applicant wherein HU (N/mm2) = W/Sd, and Sd is depression surface (mm2 or area) and W is force (N) (p. 37 [0163]). Therefore, the equation cited by Nakata is the same as the equation taught by the applicant wherein each set of inventors use different nomenclature to define the same variables. Furthermore, Nakata teaches that the hardness be determined in the same environmental conditions as the applicant, namely a temperature of 23C and a humidity of 50% (p. 37 [0164]). Nakata does not teach that the force supplied to the indenter be 30 mN, however, this is an experimental variable that can be changed at the experimenters discretion.

Nakata therefore teaches that by having a high hardness, in a range of about 275 to 380 N/mm2, the durability of the photoreceptor as well as the film strength and the abrasion resistance are all improved. Therefore, it would have been obvious to any person of ordinary skill in the art at the time of the invention to have formed the photoreceptor of JP '820 to have a high hardness as taught by Nakata in the range of about 275 to 380 N/mm2. This would have improved the durability, film strength, and abrasion resistance of the photoreceptor of JP '820.

In embodiments, the photoreceptor of JP '820 is substantially similar to that of

the applicant. JP '820 teaches that the charge transport layer contain the enamine

compound described above dispersed in a polycarbonate binder resin to form a

transport layer (p. 65-66 [0216-17]). The ratio of the enamine to the polycarbonate is

taught to 5:8, respectively by JP '820, or 39% enamine compound and 61%

polycarbonate resin (5/8 x 100% = 39% for enamine compound) and the layer has a

thickness of 21 micrometers ([0027]). The applicant teaches a substantially similar

transport layer comprising an enamine compound and polycarbonate resin in a ratio of

100:112, respectively and the layer has a thickness of 26 micrometers (p. 69 [0205] of

pre-grant publication). The applicant therefore teaches 47% enamine compound and

53% polycarbonate resin (100/212 x 100% = 47% enamine). Furthermore, JP '820

teaches the same undercoating layer comprising titanium dioxide and a copolyamide

resin (CM8000) and the same charge generating layer comprising oxy

titanylphthalocyanine and butyral resin ([0027]). The applicant also teaches an

undercoating layer comprising titanium dioxide and a copolyamide resin (CM8000) and

a charge generating layer comprising titanylphthalocyanine and a butyral resin (p. 69

[0203-204]). Therefore, since JP '820 teaches a photoreceptor of substantially similar

composition to that of the applicant, supplying it with a hardness within the range taught

by Nakata *et al.* would have also produced a creep value similar to that taught by the

applicant and certainly within the range of 2.7 to 5%. The applicant describes the creep

value as a sequential deformation phenomenon undergone by a material by application

of a load (pressure). Therefore, since JP '820 teaches substantially similar materials in

their charge transport layers providing the transport layer with a hardness in the range

taught by Nakata would have also provided the transport layer with a creep value within

the applicant's range.

Claims 1,3-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP

06-043674 in view of Nakata *et al.* (US PGP 2002/0119382).

JP 06-043674 (henceforth '674) teaches a photoreceptor containing an enamine

compound of formula (I) in the photosensitive layer. Formula (I) has the same structure

as that of the applicant's formula (1) when in the formula of JP '674 X represents a

=C(A)(B) group and A, B, R3, and R4 are aryl groups ([0009-10]) and wherein "n" of the

applicant's formula (1) represents 0. Formula (II) lists a specific formula wherein X is

the requisite =C(A)(B) group ([0012-13]) and formula (IV) has the same structure as

formula (II) wherein R3 and R4 are aryl groups as in the applicant's formula (1) of

pending claim 1 ([0015-16]). Table II of JP '674 shows exemplary compounds 4 and 18

wherein R3, R4, A and B all represent phenyl groups and thus represent a specific

embodiment possessing the same formula as the applicant's formula (1) ([0056]). The

groups R3, R4, A and B correspond to the applicant's groups Ar1, Ar2, Ar4 and Ar5,

which are all designated as aryl groups. JP '674 further teaches that their

photoconductors may have a single photosensitive layer or may have a multi-layered

configuration wherein a charge transport layer is disposed upon a charge generating

layer ([0066-70]).

The applicant defines the plastic deformation hardness value (Hplast) as the hardness calculated by dividing a force applied to the photoreceptor by an indentation area, defined as A(hr)=26.43xhr2 (p. 64 [0154]). This is so named "plastic deformation hardness value" is commonly known in the art as universal hardness (HU), which is defined in the same manner and using the same equation. Nakata *et al.* teach a photoreceptor exhibiting good durability and stable performance regardless of environmental change (Abstract). The photoreceptors have a measured hardness (HU) in the range of from 275-380 N/mm2 (p. 39-40 Table 1). It is taught that photoreceptors with such high hardness values show good durability, high film strength, and good abrasion resistance (p. 43 [0208]). The hardness value is calculated in the same manner taught by the applicant wherein HU (N/mm2) = W/Sd, and Sd is depression surface (mm2 or area) and W is force (N) (p. 37 [0163]). Therefore, the equation cited by Nakata is the same as the equation taught by the applicant wherein each set of inventors use different nomenclature to define the same variables. Furthermore, Nakata teaches that the hardness be determined in the same environmental conditions as the applicant, namely a temperature of 23C and a humidity of 50% (p. 37 [0164]). Nakata does not teach that the force supplied to the indenter be 30 mN, however, this is an experimental variable that can be changed at the experimenters discretion.

Nakata therefore teaches that by having a high hardness, in a range of about 275 to 380 N/mm2, the durability of the photoreceptor as well as the film strength and the abrasion resistance are all improved. Therefore, it would have been obvious to any person of ordinary skill in the art at the time of the invention to have formed the

photoreceptor of JP '674 to have a high hardness as taught by Nakata in the range of

about 275 to 380 N/mm2. This would have improved the durability, film strength, and

abrasion resistance of the photoreceptor of JP '674. In embodiments, the photoreceptor

of JP '674 is very similar to that of the applicant. JP '674 teaches that the charge

transport layer contain the enamine compound described above dispersed in a styrene-

acrylate binder resin to form a transport layer (p. 65-66 [0216-17]). The applicant

employs a polycarbonate binder resin, which would certainly be expected to have

different mechanical properties, however, in separate embodiments for charge

transporting layers employing compounds of formula (V) instead of formula (II) JP '674

employ polycarbonate resins. JP '674 further teaches that suitable monomers for

forming resins for the charge transporting layers are alkaline in nature such as the

polyarylate precursors having a carboxyl group, or a phenolic hydroxyl group ([0080]).

Therefore, it would have been further obvious to any person of ordinary skill in the art at

the time of the invention to have produced the charge transport layer of JP '674 having

a polyarylate binder resin. The ratio of the enamine to the binder resin in example 2 is

taught to 1:2, respectively by JP '674, or 33% enamine compound and 66%

polycarbonate resin (1/3 x 100% =33% for enamine compound). The applicant teaches

a similar transport layer comprising an enamine compound and polycarbonate resin in a

ratio of 100:112, respectively (p. 69 [0205] of pre-grant publication). The applicant

therefore teaches 47% enamine compound and 53% polycarbonate resin (100/212 x

100% = 47% enamine). Therefore, since JP '674 teaches a charge transport layer of

similar composition to that of the applicant, supplying it with a hardness within the range

taught by Nakata *et al.* would have also produced a creep value similar to that taught by

the applicant and certainly within the range of 2.7 to 5%. The applicant describes the

creep value as a sequential deformation phenomenon undergone by a material by

application of a load (pressure). Therefore, since JP '674 teaches similar materials in

their charge transport layers providing the transport layer with a hardness in the range

taught by Nakata would have also provided the transport layer with a creep value within

the applicant's range.

Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP

2003-012619 in view of Nakata *et al.* (US PGP 2002/0119382).

JP 2003-012619 (henceforth JP '619) teach a photoconductor having a the

general formula (1), which is the same as the applicant's general formulas 1 and 2 in

pending claims 1 and 2 ([0014]). In the Formula of JP '619 Ar1, Ar2, Ar4 and Ar5 are all

aryl groups ([0015]). Formula (3) of JP '619 teaches a more specific form of formula (1)

wherein Ar3 is a biphenyl group ([0021-22). In all of the formulas of JP '619, Ar1 and

Ar2 combine to form a ring, which is encompassed by the applicant's formulas in

pending claims 1 and 2. The enamine compound represented by formula (3) of JP '619

is taught to function as a charge transport compound ([0024]). Furthermore, JP '619

teach a photoreceptor having a laminate type structure, wherein the charge transporting

layer is disposed on the charge generating layer ([0026]). The photoconductor

described above is further taught to be used in an image forming apparatus. The image

forming apparatus further comprises an electrifying device for charging the

photoreceptor, a semiconductor laser for exposing the photoreceptor and forming a
latent image, a development means for developing the latent image, a transfer device
for transferring the developed image to a recording medium, and a cleaning device for
cleaning the photoreceptor ([0159-162]).

The applicant defines the plastic deformation hardness value (Hplast) as the
hardness calculated by dividing a force applied to the photoreceptor by an indentation
area, defined as A(hr)=26.43xhr2 (p. 64 [0154]). This is so named "plastic deformation
hardness value" is commonly known in the art as universal hardness (HU), which is
defined in the same manner and using the same equation. Nakata *et al.* teach a
photoreceptor exhibiting good durability and stable performance regardless of
environmental change (Abstract). The photoreceptors have a measured hardness (HU)
in the range of from 275-380 N/mm2 (p. 39-40 Table 1). It is taught that photoreceptors
with such high hardness values show good durability, high film strength, and good
abrasion resistance (p. 43 [0208]). The hardness value is calculated in the same
manner taught by the applicant wherein HU (N/mm2) = W/Sd, and Sd is depression
surface (mm2 or area) and W is force (N) (p. 37 [0163]). Therefore, the equation cited
by Nakata is the same as the equation taught by the applicant wherein each set of
inventors use different nomenclature to define the same variables. Furthermore,
Nakata teaches that the hardness be determined in the same environmental conditions
as the applicant, namely a temperature of 23C and a humidity of 50% (p. 37 [0164]).
Nakata does not teach that the force supplied to the indenter be 30 mN, however, this is
an experimental variable that can be changed at the experimenters discretion.

Nakata therefore teaches that by having a high hardness, in a range of about 275 to 380 N/mm2, the durability of the photoreceptor as well as the film strength and the abrasion resistance are all improved. Therefore, it would have been obvious to any person of ordinary skill in the art at the time of the invention to have formed the photoreceptor of Obata *et al.* to have a high hardness as taught by Nakata in the range of about 275 to 380 N/mm2. This would have improved the durability, film strength, and abrasion resistance of the photoreceptor of JP '619. In embodiments, the photoreceptor of JP '619 is substantially similar to that of the applicant. JP '619 teaches that the charge transport layer contain the enamine compound described above dispersed in a polycarbonate binder resin to form a transport layer (p. [0174]). The ratio of the enamine to the polycarbonate is taught to 8:10, respectively by JP '619, or 44% enamine compound and 56% polycarbonate resin (8/18 x 100% =44% for enamine compound). The applicant teaches a substantially similar transport layer comprising an enamine compound and polycarbonate resin in a ratio of 100:112, respectively (p. 69 [0205] of pre-grant publication). The applicant therefore teaches 47% enamine compound and 53% polycarbonate resin (100/212 x 100% = 47% enamine). Therefore, since JP '619 teaches a charge transport layer of substantially similar composition to that of the applicant, supplying it with a hardness within the range taught by Nakata *et al.* would have also produced a creep value similar to that taught by the applicant and certainly within the range of 2.7 to 5%. The applicant describes the creep value as a sequential deformation phenomenon undergone by a material by application of a load (pressure). Therefore, since JP '619 teaches substantially similar materials in their

charge transport layers providing the transport layer with a hardness in the range taught

by Nakata would have also provided the transport layer with a creep value within the

applicant's range.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over JP 2002-

365820 in view of Nakata *et al.* (US PGP 2002/0119382) as applied to claims 1, 3-5

above, and further in view of Diamond (p. 160-62).

The complete discussion of JP '820 above is included here. JP '820, while

teaching a photoconductor for use in an image forming apparatus, does not teach the

specific desired components of said image forming apparatus.

Diamond teaches that a xerographic machine (or image forming apparatus) must

contain means for charging a photoreceptor, exposing the charged photoreceptor with

light to form an electrostatic latent image, developing the latent image with toner

particles, transferring the developed image to a substrate, fusing the substrate to the

substrate and cleaning the photoreceptor (p. 160-162).

Therefore, since JP '820 teaches a photoconductor for use in an image forming

apparatus, it would have been obvious to any person of ordinary skill in the art a the

time of the invention to have included the photoreceptor of JP '820 in an image forming

apparatus comprising the common elements of an image forming apparatus as taught

by Diamond.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over JP 06-

043674 in view of Nakata *et al.* (US PGP 2002/0119382) as applied to claims 1, 3-5

above, and further in view of Diamond (p. 160-62).

The complete discussion of JP '674 above is included here. JP '674, while

teaching a photoconductor for use in an image forming apparatus, does not teach the

specific desired components of said image forming apparatus.

Diamond teaches that a xerographic machine (or image forming apparatus) must

contain means for charging a photoreceptor, exposing the charged photoreceptor with

light to form an electrostatic latent image, developing the latent image with toner

particles, transferring the developed image to a substrate, fusing the substrate to the

substrate and cleaning the photoreceptor (p. 160-162).

Therefore, since JP '674 teaches a photoconductor for use in an image forming

apparatus, it would have been obvious to any person of ordinary skill in the art a the

time of the invention to have included the photoreceptor of JP '674 in an image forming

apparatus comprising the common elements of an image forming apparatus as taught

by Diamond.

Double Patenting

Claims 1-6 are provisionally rejected on the ground of nonstatutory obviousness-

type double patenting as being unpatentable over claims, 1 and 3 of copending

Application No. 10/550888 in view of Obata *et al.* (US PGP 2004/0101770) and further

in view of Nakata *et al.* (US PGP 2002/0119382). Copending application 10/550888

teaches a photoconductor and image forming apparatus having a creep value of 2.7 %

or more when the indenting load is a maximum of 30 mN at a temperature 25 C and a

relative humidity of 50% (claims 1 and 3). Copending application 10/550888 does not

teach the use of a charge transport compound having the formula (1) in the present

application nor a hardness value as specified in pending claim 1 of the present

application. The complete discussions of Obata and Nakata above are included here.

Nakata teaches that by increasing hardness good anti-abrasion, durability and film

strength are all achieved. Obata teaches that by using the compound of fromula (1) a

phtoconductor having high reliability, high charge potential, high sensitivity, good

responsiveness to light, and good durability is produced. Therefore, it would have been

obvious to any person of ordinary skill in the art at the time of the invention to have

produced the photoreceptor of Copending application 10/550888 having the hardness

taught by Nakata and the charge transporting compound taught by Obata.

This is a <u>provisional</u> obviousness-type double patenting rejection.

Claims 1-6 are provisionally rejected on the ground of nonstatutory obviousness-

type double patenting as being unpatentable over claims 1 and 4-6 of copending

Application No. 11/198405 in view of Obata *et al.* (US PGP 2004/0101770) and further

in view of Nakata *et al.* (US PGP 2002/0119382). Copending application 11/198405

teaches a photoconductor and image forming apparatus having a creep value of 2.7 %

or more when the indenting load is a maximum of 5 mN at a temperature 25 C and a

relative humidity of 50% (claims 1 and 5-6). Copending application 10/550888 does not

teach the use of a charge transport compound having the formula (1) in the present

application nor a hardness value as specified in pending claim 1 of the present

application. The complete discussions of Obata and Nakata above are included here.

Nakata teaches that by increasing hardness good anti-abrasion, durability and film

strength are all achieved. Obata teaches that by using the compound of fromula (1) a

phtoconductor having high reliability, high charge potential, high sensitivity, good

responsiveness to light, and good durability is produced. Therefore, it would have been

obvious to any person of ordinary skill in the art at the time of the invention to have

produced the photoreceptor of Copending application 10/550888 having the hardness

taught by Nakata and the charge transporting compound taught by Obata.

This is a provisional obviousness-type double patenting rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to PETER L. VAJDA whose telephone number is

(571)272-7150. The examiner can normally be reached on 7:00AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Mark Huff can be reached on 571-272-1385. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the
Patent Application Information Retrieval (PAIR) system. Status information for
published applications may be obtained from either Private PAIR or Public PAIR.
Status information for unpublished applications is available through Private PAIR only.
For more information about the PAIR system, see http://pair-direct.uspto.gov. Should
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USPTO Customer Service Representative or access to the automated information
system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Christopher RoDee/
Primary Examiner, Art Unit 1795

/PLV/ 08/20/2008